

NEEDLE FASCIOTOMY

Dupuytren's contracture is a thickening of deep tissue (fascia), which passes from the palm into the fingers. Shortening of this tissue causes "bands" which pull the fingers into the palm.

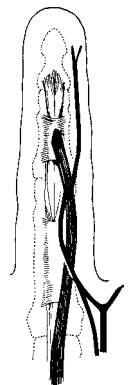
Needle fasciotomy (needle aponeurotomy) is one of a number of operations for Dupuytren's contracture. It has recently received publicity in the media and therefore is being specifically requested by patients. It is suggested that it is a new and superior technique because it avoids "open" surgery.

Needle fasciotomy is **suitable** for very well defined bands, palmar involvement, mild contractures or patients who are unfit or unsuitable for more complicated surgery. It is **unsuitable** for ill-defined or diffuse bands, skin involvement, severe contractures and rapidly recurrent disease.

The **technique** involves the cutting of these fascial bands with a syringe needle via multiple small puncture sites in the palm and fingers. The operation is often performed under **local anaesthetic** (awake with numbed hand) and virtually always as a **day-case**. **Post-operatively**, a light dressing is applied to the hand that can be removed after 24-72 hours. Patients are encouraged to **move and use** the hand immediately, albeit with some common-sense limitations.



The **disadvantage** of the technique is that it is "blind". The technical challenge of any surgery for Dupuytren's contracture is that the disease can displace the nerves and arteries within the fingers from their usual position. In an open operation, the surgeon sees and avoids them whereas needle fasciotomy requires the surgeon to estimate the position of these structures. It also does not allow deep bands to be cut safely making it difficult to correct joint contractures. The technique also merely cuts rather than removes the fascial bands and therefore recurrence of contractures occur earlier and more often. Despite these limitations, it is a good technique in carefully selected patients.



The **complications** include (i) tearing of the needle holes in the skin, slightly delaying healing, (ii) bleeding and bruising, (iii) infection, (iv) numbness, (v) scar tenderness, (vi) tendon damage, (vii) stiffness, (viii) incomplete correction and (ix) recurrence.